



DEPARTMENT OF THE AIR FORCE

59TH MEDICAL WING (AETC)  
LACKLAND AIR FORCE BASE TEXAS

2 MAR 2016

MEMORANDUM FOR SGVT

ATTN: SSGT FIRAS ZAKO/KRAIG VANDEWALLE

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

1. Your paper, entitled Bond Strength of Composite to Dentin using Resin-Modified Glass Ionomers as Bonding Agents presented at Journal of Dental Research with MDWI 41-108, and has been assigned local file #16086.
2. Pertinent biographic information (name of author(s), title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.
3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are 59 MDW staff member, we can forward your request for funds to the designated wing POC.
4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

Linda Steel-Goodwin

LINDA STEEL-GOODWIN, Col, USAF, BSC  
Director, Clinical Investigations & Research Support

Instructions to submit an approval request for  
PROFESSIONAL MEDICAL RESEARCH PUBLICATIONS/PRESENTATIONS

1. Complete page two of 59 MDW Form 3039 (this form).
2. Print your name, sign and date the form in the author's signature block or use electronic signature
3. Attach a copy of the WHASC IRB or IACUC approval letter for the research related study.
4. Attach a copy of your abstract, paper, poster and other supporting documentation.
5. Save and forward, via email, the processing form and all supporting documentation to your commander for review/approval.
6. On page 2, have your commander:
  - a. Print their name, sign and date the form in the commander's signature block or use electronic signature.
  - b. Contact the 59th CRD/Publications and Presentations Section at (292-7141) for instructions for submitting the request form.
7. The 59 CRD/Publications and Presentations Section will route the request form to clinical investigations and public affairs and forward you a final letter of approval or disapproval.
8. Once your manuscript, poster or presentation has been approved for public release you may proceed with your publication or presentation submission activities.
9. If your manuscript is accepted for scientific publication, please contact the 59th CRD/Publications and Presentations Section (292-7141). This information is reported to the 59 MDW/CC.

**NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer:

***"The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense, or its Components."***

PROCESSING OF PROFESSIONAL MEDICAL RESEARCH PUBLICATIONS/PRESENTATIONS			
<b>TO:</b> Clinical Research Division/SGVU (59th CSPG/SGVU)	<b>FROM: (Name/Rank/Office Symbol)</b> Kraig Vandewalle /Civ/SGDTG		<b>PROTOCOL NUMBER:</b> DECS 15-009
<b>PROTOCOL TITLE</b> Bond Strength of Composite to Dentin using Resin-modified Glass Ionomers as Bonding Agents			
<b>1. TITLE OF MATERIAL TO BE PUBLISHED OR PRESENTED</b> Bond Strength of Composite to Dentin using Resin-modified Glass Ionomers			
<b>2. IS THIS MATERIAL CLASSIFIED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
<b>3. IS THIS MATERIAL SUBJECT TO ANY LEGAL RESTRICTIONS FOR PUBLICATION OR PRESENTATION THROUGH A COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA), MATERIAL TRANSFER AGREEMENT (MTA), INTELLECTUAL PROPERTY RIGHTS AGREEMENT, ETC. ?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO    (NOTE: If the answer is 'YES' then attach a copy of the Agreement to the Publications/Presentations Request Form)			
<b>4. MATERIAL IS FOR (Check appropriate box or boxes for approval with this request.) (ATTACH COPY OF MATERIAL TO BE PUBLISHED/PRESENTED)</b>			
<input type="checkbox"/>	PUBLICATION/JOURNAL (List intended publication/journal)		
<input checked="" type="checkbox"/>	PUBLISHED ABSTRACT (List intended journal) Journal of Dental Research		
<input type="checkbox"/>	POSTER (To be demonstrated at meeting/Name of Meeting, City, State, and Date of Meeting)		
<input type="checkbox"/>	PLATFORM PRESENTATION (At civilian institutions/Name of Meeting, State, and Date of Meeting)		
<input type="checkbox"/>	OTHER (Describe, Name of Meeting, City, State, and Date of Meeting)		
<b>POINT OF CONTACT</b>			
<b>5. WHO IS THE PRIMARY WHASC POINT OF CONTACT? (Last, First, M.I.) (Include email)</b> Vandewalle, Kraig, S. kraig.vandewalle.3@us.af.mil			<b>DUTY PHONE/PAGER No.</b> 210-671-9822
<b>AUTHORSHIP AND CO-AUTHOR(S) (List in the order they will appear in the manuscript)</b>			
LAST NAME, FIRST NAME AND MI.	GRADE/RANK	SQUADRON/GROUP/OFFICE SYM	INSTITUTION (If not 59 MDW)
a. Primary/corresponding author Zako, Firas	SSgt	59 DG	WHASC
b. Lien, Wen	LtCol	59 DG/ DECS	WHASC
c. Risk, Douglas	Col	59 DG/DECS	WHASC
d. Roberts, Howard	Col	81 DS	Keesler AFB, MS
e. Vandewalle, Kraig	Civ	59 DTS/59 DG/SGDTG	WHASC
f.			
g.			
h.			
i.			
i.			
<b>I CERTIFY ANY HUMAN OR ANIMAL RESEARCH RELATED STUDIES WERE APPROVED AND PERFORMED IN STRICT ACCORDANCE WITH 32 CFR 219, AFMAN 40-401_IP AND 59 MDWI 41-108. I HAVE READ THE FINAL VERSION OF THE ATTACHED MATERIAL AND CERTIFY THAT IT IS AN ACCURATE MANUSCRIPT FOR PUBLICATION AND/OR PRESENTATION.</b>			
<b>AUTHOR'S PRINTED NAME/RANK/GRADE</b> Kraig Vandewalle, Civ	<b>AUTHOR'S SIGNATURE</b> <div style="border: 1px solid black; padding: 2px; text-align: center;">VANDEWALLE.KRAIG.S.1130663733,</div>		<b>DATE</b> 12 Feb 2016
<b>COMMANDER'S PRINTED NAME, RANK</b> Nancy C. Motyka, Col	<b>COMMANDER'S SIGNATURE</b> <div style="border: 1px solid black; padding: 2px; text-align: center;">MOTYKA.NANCY.C.1262633256,</div>		<b>DATE</b> 12 Feb 2016



PROCESSING OF PROFESSIONAL MEDICAL RESEARCH PUBLICATIONS/PRESENTATIONS		
<b>1st INDORSEMENT (SGVU Use Only)</b>		
<b>TO: Clinical Research Division</b> <b>59TH CSPG/SGVU</b> <i>(Contact 292-7141 for email instructions)</i>	<b>1. DATE RECEIVED</b>  <div style="text-align: center;">2/22/2016</div>	<b>2. ASSIGNED PROCESSING REQUEST FILE NUMBER</b>  <div style="text-align: center;">16086</div>
<b>3. DATE REVIEWED</b>  <div style="text-align: center;">22 Feb 2016</div>		<b>4. DATE FORWARDED TO PA</b>
<b>5. AUTHOR CONTACTED FOR RECOMMENDED OR NECESSARY CHANGES</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES <i>(If yes, give date)</i> <input type="checkbox"/> N/A		
<b>6. COMMENTS</b> <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED  The abstract is approved.		
<b>PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER</b>  Rocky Calcote, PhD Clinical Research Administrator	<b>SIGNATURE OF REVIEWER</b>  <div style="border: 1px solid black; padding: 2px; text-align: center;">CALCOTE.ROCKY.D.1178245844</div>	<b>DATE</b>  <div style="text-align: center;">22 Feb 2016</div>
<b>2ND INDORSEMENT (PA Use Only)</b>		
<b>TO:</b>  <b>OFFICE OF PUBLIC AFFAIRS (PA)</b>	<b>1. DATE RECEIVED</b>  <div style="text-align: center;">1 March 2016</div>	<b>2. DATE FORWARDED TO 59TH CSPG/SGVU</b>  <div style="text-align: center;">1 March 2016</div>
<b>3. COMMENTS</b> <input checked="" type="checkbox"/> APPROVED <i>(In compliance with security and policy review directives)</i> <input type="checkbox"/> DISAPPROVED		
<b>PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER</b>  Christopher Carwile, TSgt/E-6, NCOIC, PA	<b>SIGNATURE OF REVIEWER</b>  <div style="border: 1px solid black; padding: 2px; text-align: center;">CARWILE.CHRISTOPHER.STEWART.1280477229,</div>	<b>DATE</b>  <div style="text-align: center;">1 Mar 2016</div>
<b>3RD INDORSEMENT (SGVU Use Only)</b>		
<b>TO: 59 CSPG/SGVU</b>		<b>1. DATE RECEIVED</b>
<b>2. SENIOR AUTHOR NOTIFIED BY PHONE OF APPROVAL OR DISAPPROVAL</b> <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> COULD NOT BE REACHED <input type="checkbox"/> LEFT MESSAGE		
<b>3. DATE WRITTEN NOTICE OF APPROVAL AND CLEARNCE MAILED TO AUTHOR:</b>		
<b>4. COMMENTS</b> <input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED		
<b>PRINTED NAME, RANK/GRADE, TITLE OF REVIEWER</b>	<b>SIGNATURE OF REVIEWER</b>	<b>DATE</b>

## Bond Strength of Composite to Dentin using Resin-modified Glass Ionomers

**Objective:** The purpose of this study was to evaluate the bond strength of composite to dentin using resin-modified glass ionomers (RMGI) as bonding agents. **Methods:** Sixty extracted human third molars were mounted in dental stone and sectioned to remove coronal tooth structure. The mounted specimens were divided into six groups based on the use of five RMGIs and a control group, Clearfil SE Bond (Kuraray), a methacrylate-based bonding agent. Fuji Bond LC (GC) and Riva Bond LC (SDI) are marketed as RMGI bonding agents for bonding methacrylate composites to tooth structure. Vitrebond (3M/ESPE) and Vitrebond Plus (3M/ESPE) are RMGI liners and Vitremer (3M/ESPE) is a RMGI restorative material. The RMGIs were applied to the dentinal surface in a thin layer. Clearfil SE Bond was applied to the cured RMGI restorative material and liner surfaces but not the RMGI bonding agents according to the manufacturers' instructions. Composite resin (Filtek Z250, 3M/ESPE) was placed into a mold (Ultradent) onto the surface of the specimen and light cured. Specimens were stored for 24 hours in 37°C distilled water and tested in shear in a universal testing machine (Instron). Data were analyzed with ANOVA/Tukey's ( $\alpha=0.05$ ). **Results:** A significant difference was found between groups ( $P=0.006$ ). See table below. **Conclusions:** There was no significant difference in shear bond strength between any of the RMGI materials. However, the shear bond strength of Clearfil SE Bond was significantly greater than Fuji Bond LC, Vitrebond, and Riva Bond LC.

	Shear Bond Strength (MPa, st dev)
Clearfil SE Bond	21.9 (5.2) a
Vitremer	19.3 (5.5) ab
Vitrebond Plus	16.5 (3.4) ab
Fuji Bond LC	14.7 (6.2) b
Vitrebond	14.3 (5.1) b
Riva Bond LC	13.9 (4.1) b
Groups with the same letter are not significantly different ( $p>0.05$ )	

The views expressed in this study are those of the authors and do not reflect the official policy of the United States Air Force, the Department of Defense, or the United States Government. The authors do not have any financial interest in the companies whose materials are discussed in this article.



**DEPARTMENT OF THE AIR FORCE**  
**AIR EDUCATION AND TRAINING COMMAND**

25 February 2016

**MEMORANDUM FOR 59 MDW/SGDTG**  
**ATTN: Mr. Kraig Vandewalle**

**FROM: 502 ISG/JA (Mr. Chad Christenson)**

**SUBJECT: Ethics Review for Journal Publication**

- 1. FACTS:** A request for a legal review of a journal abstract titled "Bond Strength of Composite to Composite to Dentin using Resin-modified Glass Ionomers as Bonding Agents" was submitted by Mr. Kraig Vandewalle. Mr. Vandewalle plans to publish this research in the Journal of Dental Research, an academic journal. The journal abstract included the required disclaimer. A Public Affairs review will be required if it has not already been obtained. Otherwise, there appear to be no conflicts of interest with publishing this abstract.
- 2. LAWS AND REGULATIONS:** DoD 5500.07-R, Joint Ethics Regulation (JER), section 3-307 established the rules governing "Teaching, Speaking and Writing." If the presentation will "deal in significant part with any ongoing or announced policy, program or operation" of the Air Force, the presenter is required to include a disclaimer that states the "views presented are those of the speaker or author and do not necessarily represent the views of DoD or its Components."
- 3. ANALYSIS:** Although the journal abstract does not "deal in significant part with any ongoing or announced policy, program or operation" of the Air Force, Mr. Vandewalle's affiliation with the Air Force may be included in the abstract, and the information was obtained as part of his military medical practice. Mr. Vandewalle included the required disclaimer that the views presented are those of the author and do not necessarily represent the views of DoD or its Components. Although the disclaimer language included in the article is not verbatim from the JER, the language used is appropriate and clearly captures the intent of the language used in the JER. A Public Affairs review will be needed if it has not already been obtained. There are no apparent conflicts of interest that would prohibit the publication of this research in the academic journal.

4. **CONCLUSION:** The journal abstract presented for review included the disclaimer required by the JER and there appear to be no conflicts of interest with publishing this abstract. If you have any questions, please call Mr. Christenson at 671-5741.

A handwritten signature in black ink, appearing to read 'C E Christenson', with a long horizontal stroke extending to the right.

CHAD E. CHRISTENSON  
Legal Intern

I concur.

A handwritten signature in black ink, appearing to read 'Arlene R. Christilles', with a long horizontal stroke extending to the right.

ARLENE R. CHRISTILLES  
Chief, Civil Law